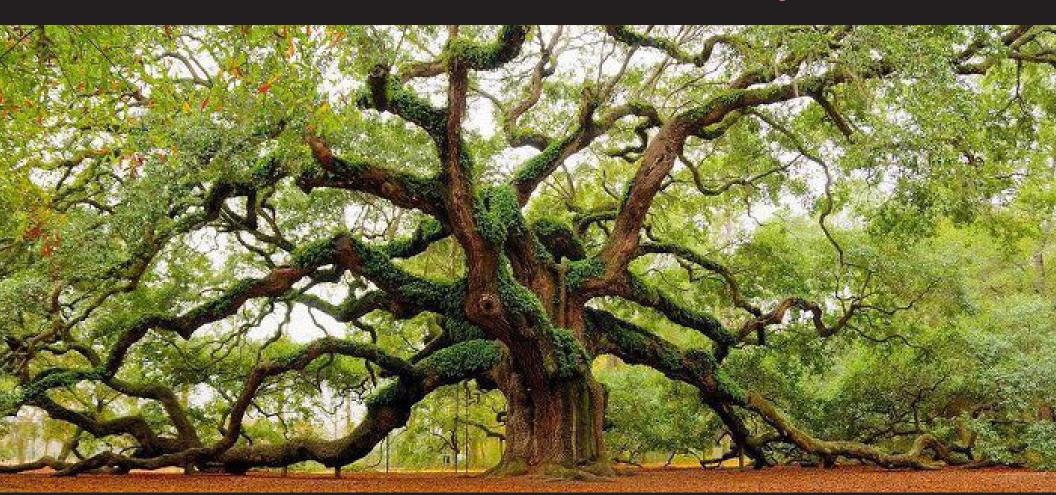


## Chief's Review Conference

Social and Ecological Interconnections of People and Forests







#### COVER

The Angel Oak Tree is a Southern live oak (*Quercus virginiana*) located in Angel Oak Park on Johns Island near Charleston, SC. The Angel Oak Tree is estimated to be at least 400 and as much as 1400-1500 years old. It stands 66.5 feet tall, measures 28 feet in circumference, and produces shade that covers 17,200 square feet Its longest branch distance is 187 feet in length. The Angel Oak Tree was the 210<sup>th</sup> tree to be registered with the Live Oak Society.

www.angeloaktree.org





**Forest Service** 

#### **OCTOBER 2014**

Southern Region 1720 Peachtree Road, NW Atlanta, GA 30309



www.fs.usda.gov/r8

Southern Research Station 200 W.T. Weaver Blvd. Asheville, NC 28804



www.srs.fs.usda.gov

International Institute of Tropical Forestry 1201 Calle Ceiba, Jardín Botánico Sur San Juan, PR 00926-1119



www.fs.usda.gov/iitf

## Contents

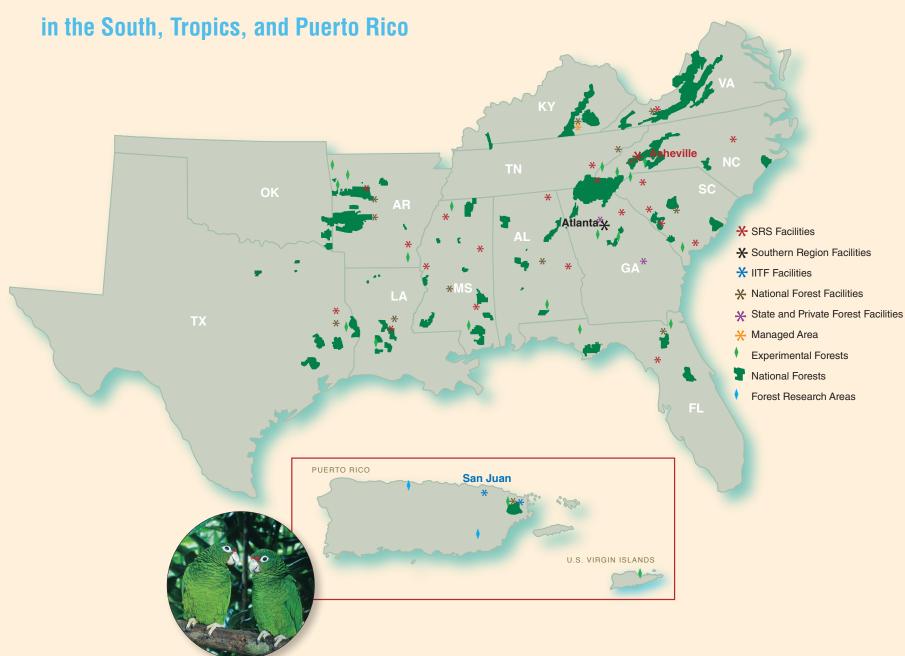
List of Forests and Administrative Units in the South, Tropics, and Puerto Rico
Regional Teams
Chief's Review Team
Welcome to Charleston!
Health and Safety
CONFERENCE WEEK at a Glance
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY2
Did You Know? 2
Potential Game Changers
Notes
Acknowledgments2







## Forests and Administrative Units



#### Alabama

**EF**—Escambia Experimental Forest

**NF**—The National Forests in Alabama work with multiple partners to restore longleaf pine in the mountains, piedmont, and coastal plains by "Reaching across Landscapes to Restore Alabama's Forests."

**RWU**—Forest Operations studies the tax, social, and economic influences on forest resources to develop guidelines for the sustainable management of forests.

#### **Arkansas**

**EF**—Alum Creek Experimental Forest

**EF**—Crossett Experimental Forest

**EF**—Henry R. Koen Experimental Forest

**EF**—Sylamore Experimental Forest

**NF**—The Ouachita National Forest covers more than 1.8 million acres in central Arkansas and southeastern Oklahoma. "Ouachita" is the French spelling of the Indian word "Washita," which means "good hunting grounds."

**NF**—The Ozark-St. Francis National Forest is home to the tallest mountain in Arkansas and a living underground cave, Blanchard Springs Caverns. The Ozark is 1.2 million acres. The St. Francis is one of the smallest (22,600 acres) and most diverse forests in the country.

**RWU**—Restoring Longleaf Pine Ecosystems highlights the physiological processes of seedling production, establishment, growth, and development of the longleaf pine.

**RWU**—Southern Pine Ecology and Management examines the influence of local and global disturbances on pine-dominated forest ecosystems in the South.

#### **Florida**

**EF**—Chipola Experimental Forest

**EF**—Olustee Experimental Forest

NF—The National Forests in Florida have more than 1.2 million acres in north and central Florida. The forests manage the 1,000-mile Florida National Scenic Trail, pristine natural water springs, the largest population of endangered red-cockaded woodpeckers, and a large prescribed burn program, including a Collaborative Forest Landscape Restoration (CFLR) project on the Osceola.

#### Georgia

**EF**—Hitchiti Experimental Forest

**EF**—Scull Shoals Experimental Forest

**HQ**—Southern Region

**NF**—The Chattahoochee-Oconee National Forest provides the finest outdoor recreation opportunities and natural resources in Georgia. Nearly 867,000 acres host thousands of miles of clear-running streams and rivers and 850 miles of recreation trails.

**RWU**—Center for Forest Disturbance Science looks at potential forest disturbances and develops response strategies to reduce forest degradation.

**RWU**—Understanding Changing Social and Natural Systems focuses on the exchange of influences between urban populations and their surrounding natural environments.

**SP**—National Seed Lab (Cooperative Forestry) in Dry Branch, GA.

**SP**—Fire and Aviation (Aviation Only) in Lawrenceville, GA.

**\$P**—Southern Area Coordination Center (Fire and Aviation) in the Atlanta area.

#### Kentucky

**NF**—The Daniel Boone National Forest is 708,000 acres of rugged terrain within the Cumberland Plateau, with steep forested slopes, sandstone cliffs, and narrow ravines, such as the Red River Gorge. The forest is a leader in watershed restoration and abandoned mine land reclamation, and works with three Job Corps Centers.

**MA**—The Land Between the Lakes National Recreation Area (LBL) is a 170,000-acre peninsula with 300 miles of shoreline in western Kentucky and Tennessee. LBL offers unique conservation education opportunities at the Woodlands Nature Station, Elk and Bison Prairie, the Homeplace 1850 working farm and Golden Pond Planetarium.

#### Louisiana

**EF**—Palustris Experimental Forest

**NF**—The Kisatchie National Forest is more than 600,000 acres of rolling pine and hardwood ridges. The forest partners with Ft. Polk to provide training to restore longleaf ecosystems.

**RWU**—Insects, Diseases, and Invasive Plants of Southern Forests focuses on restoring, establishing, developing, and managing longleaf pine ecosystems impacted by the threat of disturbances.

**RWU**—Utilization of Southern Forest Resources focuses on chemistry, science, engineering, and forest management principles to safely maximize forest utilization.

**SP**—Forest Health Protection (Alexandria Field Office)

#### Mississippi

**EF**—Delta Experimental Forest

**EF**—Harrison Experimental Forest

**EF**—Tallahatchie Experimental Forest

**NF**—The National Forests in Mississippi consist of 1.2 million acres from Tennessee to the Gulf. Mississippi leads in prescribed burning (200,000 acres/year). Their recently released forest plan will guide a CFLR project on the coastal plain.

**RWU**—Forest Genetics and Ecosystems Productivity focuses on improving the health, productivity, and genetic diversity of southern forests.

**RWU**—Center for Bottomland Hardwoods Research looks at the health and sustainability of bottomland forest tree and plant communities.

#### North Carolina

**EF**—Bent Creek Experimental Forest

**EF**—Blue Valley Experimental Forest

**EF**—Coweeta Hydrologic Laboratory

#### **HQ**—Southern Research Station

**NF**—The National Forests in North Carolina's 1.25 million acres include the first tract of land ever purchased under the Weeks Act. As the third-most visited national forest, it is home to the Cradle of Forestry in America, as well as a mid-adopter under the 2012 Planning Rule.

**RWU**—Eastern Forest Environmental Threat Assessment Center focuses on providing information about forest threats and promoting practices for more resilient forests.

**RWU**—Center for Integrated Forest Science researches the complexity of natural resource management and policy.

**RWU**—Forest Economics and Policy focuses on tax, social, and economic influences on forest resources to develop guidelines for the sustainable management of forests.

**RWU**—Center for Forest Watershed Research examines effects of population growth, climate change, and invasive species on water supply and quantity.

**RWU**—Upland Hardwood Ecology and Management emphasizes restoring, managing, sustaining, and enhancing the vegetation and wildlife of southern upland hardwood forests.

**SP**—Forest Health Protection (Asheville Field Office)

#### **Puerto Rico**

**EF**—Luquillo Experimental Forest

**NF**—Covering 28,000 acres and receiving more than 200 inches of rain per year, the El Yunque National Forest is the sole tropical rain forest in the National Forest System. The forest is an early adopter under the 2012 Planning Rule and has been protected since 1876.

FRA—Guyama Forest Research Area

FRA-Manatí Forest Research Area

**RWU**—Tropical American Forest Conservation develops and disseminates scientifically based knowledge that contributes to the conservation of forests, wildlife, and watersheds of the American tropics in the context of environmental change.

**HQ**—International Institute of Tropical Forestry

#### **South Carolina**

**EF**—John C. Calhoun Experimental Forest

**EF**—Santee Experimental Forest

**NF**—The Francis Marion & Sumter National Forests encompass 630,000 acres from the mountains to the sea. The Francis Marion is a mid-adopter under the 2012 Planning Rule and may be the first forest in the Nation to complete a forest plan revision under the new rule.

**MA**—The Savannah River Site manages 170,000 acres of natural resources on U.S. Department of Energy's land.

#### Tennessee

**NF**—The Cherokee National Forest spans 650,000 acres in eastern Tennessee. The forest is restoring native brook trout to high-elevation streams, while hosting guided snorkeling tours on one of the most biodiverse rivers in the world.

**RWU**—Forest Inventory and Analysis (FIA) focuses on forest land data to improve the understanding of the southern forest ecosystem.

#### Texas

**EF**—Stephen F. Austin Experimental Forest

NF—The National Forests and Grasslands in Texas cover 675,000 acres and encompass two of the most popular recreational lakes in Texas—Sam Rayburn and Toledo Bend Reservoirs—as well as the only national grasslands in the Southern Region—Caddo and Lyndon B. Johnson.

#### **Virginia**

**NF**—The George Washington & Jefferson National Forests, at nearly 1.8 million acres, make up one of the largest blocks of public land in the East and host the Appalachian Trail, Mt. Rogers National Recreation Area, scenic byways, and nearly two dozen wilderness areas.

#### **U.S. Virgin Islands**

**EF**—Estate Thomas Experimental Forest

EF—Experimental Forest
NF—National Forest
RWU—Research Work Unit
SP—State and Private Forest
MA—Managed Area
FRA—Forest Research Area
HQ—Headquarters

## Regional Teams



#### **Southern Region Leadership Team**



#### Ken Arney

Acting Regional Forester

#### Jerome Thomas

Deputy Regional Forester Natural Resources

#### **Mary Morris**

Deputy Regional Forester Operations, Engineering, & Recreation

#### Pablo Cruz

Forest Supervisor El Yunque National Forest

#### **Betty Jewett**

Forest Supervisor Chattahoochee-Oconee National Forest

#### JaSal Morris

Forest Supervisor Cherokee National Forest

#### Bill Lorenz

Deputy Forest Supervisor Daniel Boone National Forest

#### Rick Lint

Forest Supervisor Francis Marion & Sumter National Forests

#### Tom Speaks

Forest Supervisor George Washington & Jefferson National Forests

#### **Eddie Taylor**

Forest Supervisor Kisatchie National Forest

#### Tina Tilley

Area Supervisor Land Between the Lakes National Recreation Area

#### Gretta Boley

Forest Supervisor National Forests in Mississippi

#### Kristin Bail

Forest Supervisor National Forests in North Carolina

#### James Melonas

Deputy Forest Supervisor National Forests in North Carolina

#### Norm Wagoner

Forest Supervisor Ouachita National Forest

#### Joby Timm

Deputy Forest Supervisor Ouachita National Forest

#### Requie Blackwell

Forest Supervisor Ozark-St. Francis National Forest

#### Mark Van Every

Forest Supervisor National Forests in Texas

#### Robert Trujillo

Director Biological & Physical Resources

#### Sherry Reaves

Director Budget & Financial Management

#### Debra Harrell

Director Civil Rights

#### John Dondero

Director Cooperative Forestry

#### **Randy Warbington**

Director Engineering

#### Shardul Raval

Director Fire & Aviation

#### Don Duerr

Director Forest Health Protection

#### Frank Beum

Director Forest Management

#### Jeffrey Vail

Director Lands, Minerals & Uses

#### Peter Gaulke

Director Planning & Resource Information Management

#### Anthony Love

Director Procurement & Property

#### Stephanie Johnson

Director Public Affairs & Support Services

#### Ann Christensen

Director Recreation, Wilderness, Heritage, & Interpretation



### International Institute of Tropical Forestry Staff with Chief Tidwell

Ariel E. Lugo Director

**Gerald Bauer** 

International Programs Manager

**Constance Carpenter** 

State & Private Forestry Programs Manager

Grizelle González

Research Project Leader

Adolfo Menendez

Administrative Officer





### **Southern Research Station Leadership Team**

**Rob Doudrick** 

Director

**Gerry Jackson** 

Assistant Director Business Operations

Cheryl Jefferson

Director Civil Rights

Kier Klepzig

Assistant Director Research

Jennifer Plyler

Assistant Director Science Delivery

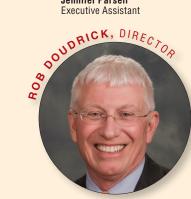
**Greg Ruark** 

Assistant Director Research

Monica Schwalbach

Assistant Director Planning & Applications

Jennifer Parsell



Bill Burkman

Program Manager Forest Inventory & Analysis

James Vogt

Deputy Program Manager Forest Inventory & Analysis

Shelly Gates Budget Officer

Mark McDonough

Group Leader Engineering

John Roberts

Group Leader Acquisition Management

Scott Goodrick

Project Leader Center for Forest Disturbance Science

Katie Greenburg

Project Leader Upland Hardwood Ecology & Management

Les Groom

Project Leader Utilization of Southern Forest Resources

Jim Guldin

Project Leader Restoring & Managing Longleaf Pine Ecosystems & Southern Pine Ecology & Management

Cassandra Johnson-Gaither

Project Leader Integrating Human & Natural Systems Danny Lee

Project Leader Eastern Forest Environmental Threat Assessment Center

Ted Leininger

Project Leader Bottomland Hardwoods

**Bud Mayfield** 

Acting Project Leader Insects, Diseases, & Invasive Plants

**Chelcy Miniat** 

Project Leader Forest Watershed Research

Dana Mitchell

Project Leader Forest Operations

Dana Nelson

Project Leader Forest Genetics & Ecosystems Productivity

**Jeff Prestemon** 

Project Leader Forest Economics & Policy

Jim Vose

Project Leader Center for Integrated Forest Science & Synthesis

**Dave Wear** 

Project Leader Center for Integrated Forest Science & Synthesis

## CHIEF'S



**Tom Tidwell** *Chief* 

**Tom Tidwell** has spent 37 years in the Forest Service, serving in various roles at all levels. He believes in collaboration and has facilitated collaborative approaches to wildland fire and roadless area management. He also has supported finding solutions based on mutual goals, thereby reducing the number of appeals and lawsuits. After Tom was named Chief in 2009, he implemented the Secretary's vision for America's forests. Under his leadership, the Forest Service is restoring healthy, resilient ecosystems that can sustain the benefits Americans get from their wildlands—clean water, abundant wildlife and fish habitat, renewable energy and wood supplies, and more. Such benefits are at risk from the effects of climate change, and Tom has led the way in forging a national response and an all-lands approach to addressing the challenges facing America's forests and grasslands.



Mary Wagner
Associate Chief

Since assuming the position of Associate Chief for the Forest Service in January 2011, Mary Wagner has worked energetically on a wide range of both external and internal issues for the Agency. Her main priorities have involved connecting people to their public lands through partnerships, restoration activities, and connections with urban communities. Internally, she continues to work with Forest Service leadership on finding ways to streamline and reduce Agency operating costs while providing a progressive, modern workplace that more closely reflects the civilian labor workforce.

Mary has spent 28 years with the Forest Service in a variety of positions—Deputy Regional Forester, Forest Supervisor, Deputy Forest Supervisor, and District Ranger. She also has served as the Forest Service's first Wilderness and Wild and Scenic Rivers Director and Assistant Director for Recreation, Heritage, and Wilderness Resources.



Leslie Weldon
Deputy Chief
National Forest System

**Leslie Weldon** was named Deputy Chief for National Forest System (NFS) in November 2011. In this role, she is responsible for policy, oversight, and direction for the natural resource programs that manage the 193 million acres of National Forests and Grasslands so they best demonstrate sustainable multiple-use management, using an ecological approach, to provide benefits to citizens. From 2009 to 2011, Leslie served as Regional Forester for the Northern Region of the Forest Service. In this position she provided oversight for management of 28 million acres of National Forests and Grasslands as well as State and Private Forestry programs in Northern Idaho, Montana, North Dakota, and South Dakota. Leslie held the position of External Affairs Officer in the Office of the Chief from June 2007 to October 2009.

### Review Team



James Hubbard
Deputy Chief
State and Private Forestry

In 2005, **James Hubbard** stepped into the position of Forest Service Deputy Chief for State and Private Forestry, with responsibility for Fire and Aviation Management, National Fire Plan, Cooperative Forestry Programs, Forest Health Protection, Conservation Education, Urban and Community Forestry, and the Office of Tribal Relations. He has been involved with national policy in natural resources, especially fire policy, for most of his career, serving in leadership positions with the National Association of State Foresters and working closely with the Western Governors' Association. Jim served as Colorado State Forester from 1984 to 2004, where he oversaw 135 full-time employees, 17 field offices across the State, and 8 million acres of private and State forest. He was a leader in the National Association of State Foresters and chaired the Council of Western State Foresters.



Jim Reaves
Deputy Chief
Research and Development

Jim Reaves' career spans 32 years in a variety of positions with Forest Service Research and Development. He assumed his current position as Deputy Chief of Research and Development in 2011 and has served as the Associate Deputy Chief, Research and Development; Director of Forest Management Sciences; Director of the Southern Research Station; Assistant Station Director for Planning and Applications in the Southern Station; National Research and Development Budget Coordinator; and USDA Agricultural Liaison Officer.

As a scientist and Project Leader, Jim has published his scientific work in national and international science journals and Research Station outlets. Jim earned his B.S. degree in biology from Voorhees College in Denmark, SC, and his M.S. and Ph.D. degrees in biology/plant pathology from Atlanta University in Atlanta, GA.



## CHIEF'S



Lenise Lago
Deputy Chief
Business Operations

**Lenise Lago** joined the Forest Service in 1989 and has worked in a variety of planning, budget, and resource management positions. As Deputy Chief for Business Operations, Lenise provides leadership and oversight for all the administrative functions for the Agency, including safety, Job Corps, and the Enterprise program. She moved to Washington, DC, to become Assistant Budget Director in October 2003 and became Director of Budget for the Forest Service in November 2006. Lenise has prepared and presented five Agency budget requests to Congress and accompanied the Chief as a witness at the annual budget hearings for three budget cycles. Lenise worked very closely with Congressional staff on a number of funding bills including the annual appropriations and emergency supplemental appropriations for hurricanes, wildfires, and the American Reinvestment and Recovery Act.



**Thelma Strong** *Chief Financial Officer* 

Thelma Strong has worked for the Forest Service for 36 years and has a wealth of experience across administrative, business, and financial areas. In September 2012, she accepted the Chief Financial Officer position and is responsible for overseeing financial management, execution of the Agency's five billion dollar budget, as well as management of approximately 450 employees. She began her career as a cooperative education student in 1978, working as a budget analyst trainee in Milwaukee, WI. In the 1980s, Thelma worked for the Shawnee, Allegheny, and Lincoln National Forests. In March 1989, Thelma moved to the Washington Office and has since held various positions including Program Analyst; Legislative Affairs Specialist; Deputy Area Budget Coordinator; Special Assistant for the Office of the Chief; and Director of the Office of Regulatory and Management Services.



**Tony Tooke**Acting Chief of Staff

Tony Tooke has worked for the Forest Service since age 18 and currently serves the Agency in Washington, DC, as the Acting Chief of Staff for the Office of the Chief. Before this position, he held two Associate Deputy Chief positions for the NFS. In his role as Associate Deputy Chief, he oversees the national director areas of Lands and Realty, Minerals and Geology, Ecosystem Management Coordination, Wilderness and Wild and Scenic Rivers, the National Partnership Office, and Business Administration and Support Services. Tony also serves as the Forest Service Executive Lead for Environmental Justice, Farm Bill implementation, and implementation of the Inventory, Monitoring, and Assessment Improvement Strategy. Other priorities include implementation of a new planning rule for the NFS as well as improving National Environmental Policy Act (NEPA) implementation to accomplish increased ecological restoration.

## Review Team



John Waconda Chief of Staff Southwestern Region Rep

In August 2014, **John Waconda** became Chief of Staff for the Southwestern Region. In this position, he coordinates special tasks and assignments. Before joining the Forest Service, he spent most of his career with the Department of the Interior, Bureau of Indian Affairs (BIA). From 1996 to 2009, John was the Regional Forester for the BIA, Southwest Region in Albuquerque, NM. In this position, he was responsible for the technical and administrative supervision, management, and protection of the region's tribal trust forest resources and served as a technical authority for forest resource management of these lands. He has served on the National Fire Management Leadership Steering Committee at the National Advanced Fire and Resource Institute representing the BIA. John is also an Interagency Serious Accident Investigation Team Leader for which he has been involved in numerous wildland fire accident investigations and reviews.



**Bob Davis**Director of Planning, Watershed and Air
Southwestern Region Rep

**Bob Davis** provides leadership for forest planning; NEPA; and soils, water, and air management issues for the Southwestern Region. In the late 1970s, Bob was selected to attend the Long Term Training program at Michigan State University as the Forest Service became extensively involved in land and resource management planning and needed additional planning expertise. In his 39-year career with the Forest Service, he has worked as a forest hydrologist on both the Targhee and San Juan National Forests; planning team leader on the Arapaho-Roosevelt National Forests, planning staff officer on the Modoc National Forest. and the regional planning coordinator for the Intermountain Region.



**George Geissler** Oklahoma State Forester

Since February 2011, George Geissler has held the position of Oklahoma's State Forester and Director of the Forestry Services Division of the Department of Agriculture Food and Forestry. Beginning his career on the Boise National Forest, he has more than 27 years of experience in natural resources and wildland fire management and six years of experience in structural firefighting as a volunteer in Idaho and New Mexico. George is a long-time member of the Society of American Foresters and is a certified forester. Before being named State forester, he served in a staff function to coordinate all forest management activities provided by Oklahoma Forestry Services, including the Forest Stewardship Program, forest management planning, prescribed fire planning, financial analysis, and technical assistance.

## Welcome to Charleston!

## We are delighted to welcome you to Charleston, South Carolina!

This Chief's Review will provide a closer look at the diligent work of the Southern Region, the Southern Research Station (SRS), and the International Institute of Tropical Forestry (IITF).

In many ways, South Carolina's famed "Holy City" reflects the entire southeastern United States and the Caribbean tropics, and the city's people embody the themes of this week's agenda:

- Charlestonians proudly honor their past and fiercely protect it, recognizing the importance of carrying forward the lessons of history;
- Charlestonians are resilient, weathering storms both natural and human-made to emerge stronger and more unified; and
- Charlestonians are optimistic, seeing a future filled with opportunities.

This centuries-old city, established as "Charles Towne" in 1670 to honor the King of England, provides the perfect backdrop for this review. The South Carolina Lowcountry has endured several wars, a few pirate ransoms, countless hurricanes, and one on the greatest earthquakes in U.S. history. Yet as you look around this week, you will find a city that's not only adapted, but thrived.

After the Civil War, Charleston city leaders didn't have the money to rebuild its damaged buildings, so they chose instead to repair them. The historical structures became one of the city's strengths and a main drawing point for visitors. Today approximately 4.5 million people visit the city annually, generating an estimated economic impact of \$3.22 billion.

In the 1990s, when word came from Washington that the Charleston Naval Shipyard and Base would close, city leaders didn't focus on the end of a nearly 100-year era. Instead, they talked about diversification and a new beginning. They worked to create a new container shipping terminal on the former shipyard site that will open in 2018. Paper and paper board, including waste, and wood pulp are currently the top two exports from the Port of Charleston. And now, with the expansion of the Panama Canal, the Port of Charleston, once coveted by Spain and France and known for indigo, cotton, rice, and naval stores, is once again positioned to be of international importance.

Through the years, Charleston's strength as a city has relied on the diversity of its communities. Early immigration by groups such as French Huguenots and Sephardic Jews influenced the present-day city, as well as the Gullah-Geechee people who were brought from Africa as slaves to work the rice plantations. (The Gullah-Geechee are a distinct people of the coastal South with have their own African-American Creole language.) Many of the American Indian tribes that once lived in South Carolina are now extinct, but the Catawba, Pee Dee, Chicora, Edisto, Santee, Yamassee, and Chicora-Waccamaw tribes are all still present in South Carolina, as are many descendants of the Cherokee.

The facility where we will meet this week, Hibernian Hall, is a National Historic Landmark, built in 1840 as a meeting place for an Irish benevolent organization founded in the city in 1801. This building is the only remaining building associated with Charleston's National Democratic Convention of 1860, and served as the headquarters for the faction supporting Stephen A. Douglas. The group held meetings downstairs and slept on cots upstairs. The convention disintegrated when no candidate summoned a two-third majority vote, which split the Democratic Party and assured the election of Abraham Lincoln, the Republican candidate.

The landscape around Charleston is steeped in history and dramatic change. The nearby longleaf pine forests provided hiding places for Revolutionary War hero Francis Marion, known as the Swamp Fox. Those same forests, once world-renowned providers of naval stores owned by only a few, were first cut over, then carved into small parcels and developed. Hurricane Hugo, the category 5 storm that hit Charleston in 1989, presented challenges to land owners and managers that will last for generations. Yet, today's people of the Lowcountry find ways to preserve what matters most to them and are working across landscapes with many partners, including the Forest Service, to make conservation happen.

In this swirl of history and culture, we'll present our organizations' strengths and opportunities. We'll also give you a sampling of Southern hospitality.

We also believe that, like Charleston itself, the three entities involved in this review are learning organizations, bringing the best of our pasts with us. Like Charlestonians, we also are optimistic and see a future filled with opportunities. With your help and guidance, we hope to chart a path that leads us all to continued success.









In this city of history and culture, we'll present our organizations' successes, strengths, and opportunities. We'll also give you a sampling of Southern hospitality.

## Health and Safety

#### Field Trip

The field trip will provide us with many opportunities to learn, as well as unexpected field conditions and weather changes.

- 1. Consider wearing water-resistant footwear with skid-resistant soles that may get dirty/muddy, a water-resistant jacket and hat/light raincoat with hood, and layered clothing in case of varying weather conditions to prevent a chill or overheating.
- 2. The Safety Team will conduct a tailgate safety session prior to any field activities. In addition, personal protective equipment (PPE) such as hard hats will be available for entering the forested environment at predetermined locations, as well as bug spray.
- 3. Restrooms may not be readily available; please use facilities at every opportunity.
- 4. Bring water to stay hydrated and adequate snacks for between meals.
- 5. Rest well to endure long days.
- 6. Tell the Incident Management Team (IMT) if you have medical/physical challenges or special needs.

#### **Venues**

Activities are scheduled at different locations, venues, and times. Please be prepared for long days with busy agendas, as well as changing environments.

#### Traveling by vehicle or on foot

No matter which mode of transportation you are using, always let others know your destination and estimated return time

#### When traveling by vehicle, please:

- 1. Remain seated and use a seat belt at all times.
- 2. Be prepared for congested traffic.
- 3. Confirm the pickup and drop off locations/ times (if traveling by shuttle).

#### When walking, please:

- 1. Watch your footing. Likelihood is high for slips, trips, and falls as the area sidewalks have uneven surfaces and may be slick when wet. Streets are sometimes narrow and often in close proximity to traffic.
- 2. Travel in groups and become familiar with your surroundings.
- 3. Know your route before you walk in unfamiliar or low illumination areas. Encountering hostile or aggressive public is unlikely, but travel in groups as much as possible, especially at night.

#### Weather

Charleston is typically beautiful in the fall. However, the possibility of rapidly changing weather and visibility conditions always exists. During this review, you may encounter sun, fog, rain, wind, dust, smoke, hot and cool temperatures, etc.

#### **Schedule**

We will be doing a lot this week, so please become familiar with your event information packet and agenda/itinerary so you know where and when you need to attend scheduled activities. Also, please don't forget to provide emergency contact information to event staff at registration.

#### **Security**

Please bring your official government picture ID or driver's license for entering controlled access points. Keep your belongings with you or securely locked at all times. Law Enforcement and Investigations has an event security plan, including a threat assessment.

#### **Situational Awareness**

Common sense will adequately address most safety concerns. However, if you see something, say something! Also, please know and understand your role, responsibilities, and duties.

#### **Unplanned events**

Unplanned events can occur at any time—the key to how well we respond is being prepared.

- 1. In case of an evacuation, know where the exits are and where your group will meet.
- 2. Take note of available fire extinguishers, first aid kits, etc.
- Check your cell phone coverage, which may be weak in certain areas; radio communications are available as needed.
- 4. If assisting the sick/injured, use blood-borne pathogens exposure barriers and follow the medical plan.
- 5. The IMT has an "incident within an incident/mishap" protocol within the event.



# Conference Week AT A GLANCE

DAY	ACTIVITIES
Monday OCTOBER 20	FIELD TRIP Issues of the South and the Tropics Represented in South Carolina's Lowcountry
Tuesday OCTOBER 21	Panel Discussion 1 History and Context of Southern Forests Panel Discussion 2 Tropical Forests and People
Wednesday OCTOBER 22	Panel Discussion 3 Workforce and Workplace Panel Discussion 4 Partnerships
Thursday OCTOBER 23	Panel Discussion 5 Forest Restoration and Sustainability Challenges Panel Discussion 6 Forest Restoration and Sustainability Solutions
Friday OCTOBER 24	Closeout/Discussion





## Monday

OCTOBER 20, 2014 @ HILTON GARDEN INN

#### **Facilitator: RICK LINT**

Forest Supervisor, Francis Marion & Sumter National Forests in South Carolina

### FIELD TRIP

## Issues of the South and the Tropics Represented in South Carolina's Lowcountry

#### When What

7:00

The shuttle will depart the Holiday Inn Express and the Mills House

Please check the weather forecast before leaving your hotel. Although Charleston is typically beautiful this time of year, we want to be prepared for rain or shine. Caps, sunscreen, and light rain gear may be needed, as well as appropriate footwear for walking on uneven, possibly wet ground. Also, we have an abundance of insects in the Lowcountry. Bug spray will be supplied; however, if you have your own special brand of insect repellent, please bring it.









The day-long field trip will include five stops that will highlight the National Forest System (NFS), Research and Development (R&D) and State and Private (S&P) programs.

- 1. A cutting-edge research project between R&D, Arborgen, and MeadWestvaco studying:
  - Clonal eucalyptus research, production, and water use;
  - Historic and current hardwood demand in the South and emerging markets:
  - Industry land ownership and future direction in the South; and
  - Industry and government partnerships.
- 2. An NFS partnership effort to protect and enhance lands within the Cooper, Wando, and Santee River watersheds. Partners include The Boeing Company, South Carolina Department of Natural Resources, Lowcountry Open Land Trust, Lord Berkeley Land Trust, Charleston County Greenbelt, and The Nature Conservancy.
- 3. A partnership and collaborative effort between the Forest Service and U.S. Fish and Wildlife Service (Cape Romain National Wildlife Refuge) at the Sewee Visitor and Environmental Education Center about the Forest Inventory and Analysis program with a sample plot.
- 4. A tour of the South Carolina Ports Authority to discuss current and future plans, including deepening the Charleston harbor.
- 5. A brief presentation by the City of Charleston Urban Forester.

#### While on the bus, participants will discuss:

- 1. The city of Charleston and the surrounding area—past, present, and future;
- 2. Lowcountry land protection efforts within the wildland-urban interface that have united a wide range of people, interests, and cultures in working toward common goals;
- 3. The impact of past and proposed development on the Francis Marion National Forest, the Cape Romain National Wildlife Refuge, and the surrounding areas;
- 4. Forest restoration challenges and successes in the longleaf pine firedependent ecosystem; and
- 5. Mitigation as a tool for land protection within the Francis Marion National Forest.





#### **Facilitator: GREG RUARK**

Assistant Director, Forest Watershed Science Southern Research Station

### Forests and People—Local and Global

When	What
7:30	Summer Student background music plays during breakfast
8:00	Facilitator calls meeting to order, covers logistics, safety, and mentions today's theme
8:15	Welcome—Southern Region, Southern Research Station, and International Institute of Tropical Forestry
8:30	Video Presentation
8:45	Southern Forest Futures Presentation and Discussion—Dave Wear
9:15	Break
9:45	Moderator Introduces PANEL 1 and Presentations History and Context of Southern Forests
10:15	Review Team Dialogue with Panel 1
11:30	Working Lunch—Program on Partnership with Job Corps
1:00	Overview of Tropical Forests and Discussion—Kathleen McGinley
1:30	Break
2:00	Moderator Introduces PANEL 2 and Presentations Tropical Forests and People
2:30	Dialogue and Discussion with Panel 2
3:45	Break
4:00	Review Team Meets at Mills House Hotel Meeting Room
	Dinner on your own

### **PANEL 1:**

### History and Context of Southern Forests

#### Moderator

#### **Rick Lint**

Forest Supervisor, Francis Marion & Sumter National Forests

#### **Panelists**

#### Wib Owen

Executive Director, Southern Group of State Foresters

#### Sarah Francisco

General Counsel, Southern Environmental Law Center

#### **Wesley Langdale**

President and CEO, The Langdale Company

#### **Jennie Stephens**

Executive Director, Center for Heirs' Property Preservation

#### **Ouestions for Panelists**

- 1 What are the lessons that the people of the South have learned that inform our thinking going forward?
- 2 What internal and external conditions have had/are having the most effect on forest conservation from the local to global perspective?

## **PANEL 2:** Tropical Forests and People

#### Moderator

#### Grizelle González

Project Leader, International Institute of Tropical Forestry

#### **Panelists**

#### Paul Chakroff

Environmental Consultant and past Executive Director of St. Croix Environmental Association

#### Ángel Crespo Ortiz

Chief, Puerto Rico Fire Department

#### Sarah Otterstrom

Executive Director, Paso Pacifico

#### Whendee L. Silver

Professor of Ecosystem Ecology and Biogeochemistry Department of Environmental Science, Policy, and Management, University of California-Berkeley

#### **Ouestions for Panelists**

- 1 What are the lessons that the people of the tropics have learned that inform our thinking going forward?
- 2 What internal and external conditions have had/are having the most effect on forest conservation from the local to global perspective?



### The Future of Forests in the South

Chartered by the Southern
Region and the SRS along
with the Southern Group of
State Foresters, the Southern
Forest Futures Project
(Futures Project) started in
2008 as an effort to forecast
changes in southern forests under
six alternative future scenarios.

The overall goal of the Futures Project is to inform land management strategies, policy discussions, and program decisions with the clearest understanding of potential long-term changes in the forests of the 13 Southern States. According to the report, urbanization, bioenergy use, weather patterns, land ownership changes, and invasive species will significantly alter the South's forests between the years 2010 and 2060. This year, the SRS released the first three of five reports that detail findings and implications for forest management and conservation at the subregional level. The reports just released cover the Appalachian-Cumberland, Piedmont, and Coastal Plain subregions that span 188 million acres from Virginia to Texas.

### The Information Needed for Decisions about Southern Forests

The SRS Forest Inventory and Analysis (FIA) program collects, analyzes, and reports on data pertaining to forest land in the Southern Region. FIA uses a nationally consistent approach and works with State forestry partners to produce annual State-level reports. FIA also collects information on timber product outputs and logging, and uses the National Woodland Owners Survey to find out more about southern forest owners including their demographic details, objectives, management practices, and future intentions. Recently, in response to requests from forest industry, FIA developed an approach to identify the optimum sites for wood pellet mills in the South. Results from industry use of the application include outlays of over \$500 million and the creation of over 300 forest sector jobs.

### Conservation and Management of Tropical Plant Species at Risk

The IITF is working with partners to increase understanding and joint action in plant conservation by developing a strategy that enables in-situ conservation and restoration and, when needed, ex-situ conservation. The Forest Health Protection program funded and helped organize a plant conservation workshop that drew participants from 40 public and private organizations from nine countries. A regional task force formed out of the workshop to protect and sustain the native plant diversity of Puerto Rico and the U.S. Virgin Islands. The workshop included training in the International Union of Conservation of Nature Red Listing process. Workshop participants immediately used the training they received to assess risks to three plants: cock's spur (Erythrina eggersii), St. Thomas prickly ash (Zanthoxylum thomasianum), and Guayabote de costa (Eugenia fajardensis).

### Shade-Grown Coffee, Birds, and People in Puerto Rico

The non-profit Cafiesencia is dedicated to raising the quality of life and achieving social justice and sustainable ecosystems in the coffee zone of economically distressed Puerto Rico. The IITF, with the Puerto Rico Ornithological Society (PROS), Bird Life International, and other local, State, and Federal agencies are working with Cafiesencia on an initiative called CAFEICANTO that enables farmers and residents to participate in economic and stewardship activities by establishing shade-grown coffee plantations that support bird watching and agro-tourism. Coffee trees grown in partial shade produce full-bodied gourmet coffee beans, while the shade trees provide avian habitat. Cafiesencia signed a collaborative agreement with PROS to serve as custodians of designated Important

Bird Areas in Maricao and Susúa that are habitat for threatened species such as the Puerto Rican nightjar and elfin-woods warbler.

### Tropical Research and Management Supports Local to Global Avian Biodiversity

Avian conservation efforts in the tropics have local and global implications as endemics and migratory species are of importance. First, the El Yungue National Forest (EYNF) Iguaca Aviary is a captive breeding facility for the endemic federally endangered Puerto Rican parrot developed in partnership with the U.S. Fish and Wildlife Service (USFWS). It has contributed 179 birds to help reestablish two wild flocks in EYNF and a third in the Maricao Commonwealth Forest. Second. EYNF, USFWS, and the Department of Natural and Environmental Resources recently signed a Candidate Conservation Agreement to conserve the endemic elfin-woods warbler's habitat and populations across Puerto Rico, to address threats and to foster research and management collaborations. Research by the IITF and collaborators on winter habitat quality and distribution in the Bahamas suggests conservation of the least drought-prone early successional habitats with favored food sources as a priority for the USFWS Kirkland's Warbler Recovery Plan.

#### Carbon Markets, Measurements, and Forest Management Research in Brazil

The IITF has long supported various scientific efforts in Brazil, which has the largest extent of tropical forests of any country. One, called Sustainable Landscapes, moves beyond carbon accounting from Reducing Emissions from Deforestation and Forest Degradation (REDD projects) to REDD+, an effort to develop and incorporate methods of measuring conservation and management contributions to carbon stocks at local to global levels to support markets. The U.S. Agency for International Development, the U.S. State Department, Forest Service Research and Development, International Programs, the Brazilian Agricultural Research Corporation, and various Brazilian government agencies and non-government organizations are working to improve technical and institutional capacity for carbon and greenhouse gas measurements and greenhouse gas accounting. Another Brazilian effort synthesizes 20 years of research in a Big-Leaf Mahogany Growth and Yield Model and others that simulate both short- and longterm responses of Big Leaf Mahogany stands to forest management practices.



#### **Facilitator: CONNIE CARPENTER**

State and Private Forestry Programs Manager International Institute of Tropical Forestry

### **Adaptive and Resilient People and Systems**

When	What
7:30	Summer Student background music plays during breakfast
8:00	Facilitator calls meeting to order, covers logistics, safety, and general overview of the day
8:15	Video Presentation
8:30	Moderator Introduces PANEL 3 and Presentations Workforce and Workplace
9:00	Break
9:30	Review Team Dialogue with Panel 3
11:00	Break
11:30	Lunch
12:30	Moderator Introduces PANEL 4 and Presentations Partnerships
1:00	Break
1:30	Review Team Dialogue with Panel 4
3:30	Break
4:00	Review Team Meets at Mills House Hotel Meeting Room
6:00	Evening Event: Tribal Relations, Charleston Visitors Center

### PANEL 3: Workforce and Workplace

#### Moderator

#### **Gretta Boley**

Forest Supervisor, National Forests in Mississippi

#### **Panelists**

#### **Walter Hill**

Dean, College of Agriculture, Environmental and Natural Sciences, Tuskegee University

#### **Tom Speaks**

Forest Supervisor, George Washington & Jefferson National Forests in Virginia

#### Bill Hodge

Director, Southern Appalachian Wilderness Stewards

#### Tischa A. Muñoz-Erickson

Principal Investigator, San Juan Urban Long-Term Research Area (ULTRA)

#### **Questions for Panelists**

- 1 What new opportunities and incentives do you envision to further innovations, partnerships, and integration?
- 2 How do we attract, develop, and retain skills and talent that reflect the public we serve and are equipped to accomplish our mission?
- **3** How can all people contribute to shaping our Agency's conservation agenda and culture?

## PANEL 4: Partnerships

#### Moderator

#### Terrell T. "Red" Baker

Chair, Department of Forestry & James Graham Brown Endowed Professor of Forestry, University of Kentucky

#### **Panelists**

#### Bill Ross, Jr.

Former Secretary of the North Carolina Department of Environment and Natural Resources

#### Jimmy Bullock

Sr. Vice President, Resource Management Services

#### **Victor Harris**

Publisher and Editor, Minority Landowner Magazine

#### **Kasey Jacobs**

Partnership Coordinator, Caribbean Landscape Conservation Cooperative

#### **Ouestions for Panelists**

- 1 How do we make the Forest Service a partner of choice?
- **2** What would it mean to increase the breadth and depth of existing and new partnerships?
- **3** How do we meaningfully involve, and make connections with, those who have historically felt excluded?

#### Stories Behind the Shield

The Southern Region public affairs team recently launched Stories Behind the Shield—an internal marketing campaign that features "selfie" photos of employees "getting behind" the Forest Service shield, accompanied by a collection

of audio short stories told by employees. Storytelling is the backbone of the campaign, since every employee has an interesting story to tell. Selfies are incorporated as daily graphics and strategically used to pique interest and involvement. Both photos and stories are accessible on a central Web page where employees can view new features every day. In the words of one participant, "Stories Behind the Shield celebrates the good work we do, makes us feel proud, inspires us, helps us listen to one another, builds camaraderie, and visits the touch-points that drew us to work here in the first place."

#### **Caribbean Foresters**

Since 1982, the IITF International Programs has organized a biennial Caribbean Foresters meeting that draws foresters, researchers, natural resource specialists, and other leaders of tropical forest and land management in the Caribbean region. The most recent meeting included over 90 participants from 27 countries, and focused on the potential effects of climate change on Caribbean forests. The Caribbean Foresters group has four primary objectives: to bring together the region's leaders in forestry and natural resource sectors to better address common problems; to establish a training program for young foresters: to share information on the effects of natural disasters on forests and watersheds, as well as their subsequent regeneration; and to develop a system of communication, information collection, and data processing for the region.

#### **Job Corps and the Southern Region**

The Job Corps program is no longer the best-kept secret in the Forest Service, and that's a good thing—for diversity, the development of talent, and the future of the Agency's workforce. On behalf of the Department of Labor, the Southern Region operates 11 Job Corps Centers. These centers not only help meet the Agency's fire, forestry, engineering, and administrative goals

but also develop skilled graduates available for hire as Forest Service employees. The Southern Region has successfully placed numerous Job Corps graduates across the United States in various Forest Service positions in forestry, fire, recreation, timber, and business management. More than 80 percent of the employees placed have been retained; several are pursuing college degrees.

#### **Engaging Tribal Partners**

The SRS partners with Native American tribes in the South on projects that range from the genetic preservation of plants of cultural and economic importance to exploring the interface between research on sustainable forest practices and traditional ecological knowledge. Over the past two years, SRS held face-to-face and virtual meetings with members of the United Southern and Eastern Tribes, Inc. to introduce the technologies TACCIMO (Template for Assessing Climate Change Impacts and Management

Options) and ForWarn. TACCIMO is

a Web-based tool natural resource managers can use to plan for and adapt to climate change

using the latest in sciencebased knowledge. ForWarn, a disturbance monitoring tool, generates maps that show in near real time the effects of disturbances such as insect pests, wildfires, and land use conversions. Tribal members

can use *ForWarn* to view past and

current forest conditions and assess the effectiveness of forest management operations.

#### **Non-Timber Forest Products**

Non-timber forest products—ranging from medicinal herbs and ginseng to mushrooms and flowers—are of great cultural, social, and economic value to the people who harvest, process, and consume them. Various commercial industries, including herbal, wild-harvested culinary, and landscaping enterprises, contribute billions to the U.S. economy. Since harvesters often use national lands to forage for these products, ensuring the sustainability of these forest products is important to the Forest Service. SRS scientists work closely with university

partners to develop new methods of tracking and monitoring the harvest of non-timber forest products in the Appalachian region, and on ways for private landowners to sustainably co-manage timber and non-timber forests products on their lands. The partners recently produced a video series for landowners on how to grow ramps, mushrooms, ginseng, and other products on their own forested acres.

### IITF International Programs Export Ecotourism Expertise

The IITF International Programs provides high quality technical assistance and builds capacity for sustainable ecotourism ventures with long-term partnerships. For example, in Nicaragua a Critical Watersheds Project with the conservation organization Paso Pacifico and others trained over 40 young people from five communities near the La Flor Wildlife Refuge as nature guides skilled in bird and turtle watching, customer service, kayaking, and first aid. Advanced students learned sustainable tourism, microenterprise, tourism value chains, and sustainable development. In another example, IITF assistance to the Los Guineos community around Laguna Limón, Dominican Republic, resulted in a kayaking tour business with trained guides and sales of souvenirs and services by local businesses. Others partners included the Mesoamerican Ecotourism Alliance; Connecticut Coastal Kayaking; the U.S. Peace Corps; and The Center for Environment, Economy, and Society at Columbia University.

#### **Southern Pine Beetle Prevention**

The Southern Pine Beetle Prevention Program is a proactive strategy to mitigate the impact of the South's most devastating native pest. Forest Health Protection, Southern Region National Forests, and the Southern Group of State Foresters have cooperated to reduce the risk of southern pine beetle on more than 1.2 million acres in the South since 2003. More than 15,000 forest landowners have benefited from the program. Increasing forest resiliency through good forest management features prominently in the plan. Treatments include thinning, prescribed burning, and restoring native pine forests. These treatments provide multiple benefits including reducing wildfire risk, improving wildlife habitat, and making forests more resilient to nonnative insects and climatic changes.



#### **Facilitator: JEROME THOMAS**

Deputy Regional Forester, Natural Resources Southern Region

### The Future—Adapting to Unpredictable Change

When	What
7:30	Summer Student background music plays during breakfast
8:00	Facilitator calls meeting to order, covers logistics, general overview of the day and introduces moderator for the day
8:05	Video Presentation
8:15	Moderator Introduces PANEL 5 and Presentations Forest Restoration and Sustainability Challenges
8:45	Break
9:00	Review Team Dialogue with Panel 5
10:30	Break
10:45	Moderator Introduces PANEL 6 and Presentations Forest Restoration and Sustainability Solutions
11:30	Working lunch
12:00	Review Team Dialogue with Panel 6
2:00	Break
2:15	Closed Session for Review Team with Region, Station, and IITF Leadership Teams
3:30	Break and Review Team Move to Mills House Meeting Room
3:45	Review Team Writes Report in Mills House Meeting Room
	Dinner on your own

### **PANEL 5:**

### Forest Restoration and Sustainability Challenges

#### Moderator

Gene Kodama

State Forester, South Carolina

#### **Panelists**

**Becky Humphries** 

Chief Conservation Officer, National Wild Turkey Federation

#### **Jeff Prestemon**

Project Leader, Southern Research Station

#### Elvia Meléndez-Ackerman

Professor, University of Puerto Rico

#### **Kevin Brown**

State Conservationist in Tennessee, Natural Resources Conservation Service

#### **Ouestions for Panelists**

- 1 Do our actions and priorities reflect the pace and scale of the game changers?
- **2** What is our involvement as a group in addressing the game changers?
- **3** What are we doing to identify and prepare for future game changers?

## **PANEL 6:** Forest Restoration and Sustainability Solutions

#### Moderator

**Kier Klepzig** 

Assistant Director, Southern Research Station

#### **Panelists**

Jim Karels State Forester, Florida

#### Carlton Owen

Executive Director, U.S. Endowment for Forest and Communities

#### Rob Olszewski

Vice President of Corporate and Environmental Affairs, Plum Creek Real Estate Investment Trust

#### Michael Keller

Research Scientist, International Institute of Tropical Forestry

#### **Questions for Panelists**

- 1 What advantages and disadvantages do you see in landscape-scale conservation?
- **2** What unique conditions drive ecological restoration and compel us to increase the pace and scale in the South and Caribbean?
- 3 What are the three to five most important conservation imperatives from the State, Regional, and National Leadership perspective that would facilitate forest sustainability across all lands? Why?

### All-Lands Approaches to Forest Conservation in the Southern Region

The Southern Region works across all lands to meet today's forest conservation challenges. America's Longleaf Restoration Initiative is successfully increasing longleaf pine forest acres toward the rangewide goal of 8 million acres. The recently launched Shortleaf Pine Initiative is responding to the dramatic decline in the shortleaf pine forests that historically extended from Texas to New Jersey. Agency support for these efforts remains strong, with the Chiefs' Joint Landscape Restoration Partnership providing \$5.3 million in 2014 for two projects in Arkansas and Mississippi. Also, the Southeast Regional Partnership for Planning and Sustainability continues to support the increased use of prescribed fire in longleaf forests. especially on private lands. Prescribed fire remains one of the region's most valuable tools, with 82 percent of the Nation's forestry-related prescribed burning occurring in the Southeast.

### Science and Management to Support Forest Restoration

SRS and the Southern Region work hand-in-hand with a wide range of partners to restore forest ecosystems across the 13 Southern States. The Forest Service plays an active role in the Longleaf Alliance, a partnership to restore the unique longleaf pine ecosystem to a natural range that stretches from Virginia to Texas, and in the new regional landscape-level initiatives developed over the past few years. Equally important are the partnerships with industry to restore bottomland hardwood forests to the Lower Mississippi Alluvial Valley and the highly effective methods to establish these forests developed by SRS scientists. Forest Service partnerships also provide leadership in restoring American chestnut, once extirpated from its natural range—as well as upland hardwood and shortleaf pine ecosystems—to lands that stretch from the Southern Appalachians to the Arkansas highlands.

### Climate Change and Forest, Agricultural, and Cultural Landscapes

Developing and delivering applied science related to climate change is a challenge because of the uncertainties related to environmental and human interactions and the need to conduct and translate research into information that managers find useful. The IITF leads the Caribbean Landscape Conservation Cooperative (CLCC), which helps researchers, managers, and decisionmakers address climate change, food security, and conservation. Activities include governance studies, a data center, stakeholder meetings, workshops, the development of a strategic science plan, and awareness activities. Partners include multiple Federal agencies, The Nature Conservancy, Para la Naturaleza, the Commonwealth of Puerto Rico Department of Natural and Environmental Resources Planning Board and Institute of Puerto Rican Culture, the Territory of the U.S. Virgin Islands Department of Planning, University of the Virgin Islands, and North Carolina State University.

#### **Tools to Address Climate Change**

SRS started meeting together in 2009 to brainstorm how to approach forest planning in relation to the problems climate change poses for southern forests. Today, national forest planners in the South use the result of this collaboration, the Web-based TACCIMO, to address complex management situations using the very latest in science-based knowledge. Fitting within the National

Environmental Policy Act process, TACCIMO can be used in land management plan revisions, environmental assessments, environmental impact statements, and reasonable alternatives. SRS brought land managers and scientists together once more to produce the chapters of the 2014 publication *Climate Change Adaptation and Mitigation Management Options*, a comprehensive guide designed to help natural resource managers in the South develop options for managing southern forest ecosystems in the face of climate change.

#### Wildland Urban Interface and SouthWrap

The South is not only one of the fastest growing regions in the United States (estimated population growth of 1.5 million people per year) but also consistently has the most wildfires per year. As housing developments push further into wildlands, many lives and communities are at risk. In response to increasing demand for accurate and timely data and information, the Southern Group of State Foresters (SGSF) and the Southern Region completed the Southern Wildfire Risk Assessment in 2005. Its goal was to provide a consistent, comparable set of scientific results for wildfire mitigation and prevention planning. To deliver the information quickly and seamlessly to stakeholders, the SGSF and Southern Region developed the Southern Wildfire Risk Assessment Portal (SouthWRAP), which is primarily used to create public awareness and provide State and local government planners with information to support wildfire mitigation and prevention.

#### **Caribbean Cohesive Wildland Fire Management**

The IITF entered into an Inter-Personnel agreement with the Puerto Rico Fire Department (PRFD) to ensure implementation of the Caribbean Cohesive Wildland Fire Strategy. One result, Frente al Fuego, engages communities and landowners in efforts to reduce fire risk using fire lines, fuel breaks, and firewise practices. The PRFD came up with the idea for the effort, which will leverage existing community and landowner programs available through the IITF, the Natural Resources Conservation Service, Cooperative Extension Service, the U.S. Fish and Wildlife Service, and the Puerto Rico Departments of Agriculture and Natural and Environmental

Resources. IITF also helped revise Caribbean Fire Danger Zones and establish Red Flag Warning criteria with the National Weather Service and U.S. Fish and Wildlife Service to benefit Puerto Rico and the Virgin Islands.



### Friday OCTOBER 24, 2014 @ MILLS HOUSE

**Facilitator: JIM REAVES**Deputy Chief, Research and Development

### **Closeout Session/Discussion**

When	What
8:00	Summer Student background music plays during breakfast
8:30	Closeout Session Discussion in Mills House Hotel Meeting Room Chief, Associate Chief, Deputy Chiefs, other members of Review Team, as well as Executive Leadership Teams.
11:30	CONFERENCE ENDS. SAFE TRAVELS!





### Did You Know?

- Southern forests are highly productive; trees regenerate and grow quickly in this land of good soil and plentiful rainfall. About 40 percent of the Nation's productive forested acres are in the South, which produces more timber than any single country in the world.
- The Forest Service and the Southern Group of State Foresters have reduced risk from southern pine beetles across 1.2 million acres in the South.
- Southern forests are an invaluable source of wood products, and these forests support a growing recreation business, remove contaminants from air and streams, supply abundant water for homes and industry, and provide diverse habitats for plants, animals, fish, and birds.
- About 35 percent of the Nation's population lives in the Southeast, which is the fastest growing part of the country.
- The Estate Thomas Experimental Forest in St. Croix, U.S. Virgin Islands is the easternmost experimental forest in the United States and the site of early studies in Mahogany and Teak regeneration.
- Nearly all of the South's forest land is privately owned, with only about 11 percent in national forests.
- The largest forest ownership (70 percent) consists of individuals, families, and corporations whose parcels are less than 100 acres.
- Thirty-one percent of the members of Congress, including the leaders of many key Congressional committees, are from the Southeast.

- The Caribbean islands have diverse, resilient forest ecosystems with over 300 tree species and important wintering grounds for Neotropical migratory species. There are 470 vertebrate species recorded in Puerto Rico and its adjacent islands, with 66 federally endangered, 12 federally threatened forest-associated species and many endemic species.
- The forest industry ranks as one of the top three manufacturers in 10 of the 13 Southern States.
- Non-timber or special forest products contribute about 1 billion dollars to the South's economy.
- The Southern Region employs about 250 people in the regional office, and approximately 3,000 throughout the Southeast.
- About 45,000 miles of streams run through the Southern Region's national forests.
- The Southern Region includes approximately 800,000 acres of restored longleaf pine.
- The Southern
  Region's national
  forests sell
  about 500
  million board
  feet of timber
  annually.



- The "Slow the Spread" program has reduced the spread of gypsy moth by 70 percent.
- The national forests in the Southern Region maintain 1,772 developed recreation sites.
- For over 75 years, IITF has worked with projects in 88 countries around the globe and all U.S. States and Territories.
- Puerto Rico and the U.S. Virgin Islands are among the most densely populated States in America; Puerto Rico averages 1,155 people per square mile and has significant areas of urban forest and land in the wildland-urban interface.
- Research conducted on the six Holdridge Life Zones found in the U.S. Caribbean is applicable across the tropical forests of Central and South America.
- The Sustainable Landscapes REDD+ project includes more than 60 partners from over 20 institutions in Brazil, which has more tropical forest than anywhere in the world.
- IITF supports student and professional training in and out of the United States; in Brazil, IITF is currently supporting 12 students in M.S., Ph.D., and post-Doctoral positions.
- IITF Headquarters is Silver Certified by the United States Green Building Council for Leadership in Energy and Environmental Design (LEED).

## Potential Game Changers for



A game changer alters the way something is thought about or done.

In preparation for the Chief's Review, the leaders of the Southern Region, SRS, and IITF established a list of game changers they see as forces affecting the way they think about and do things now and into the future.

The list of game changers also served as a touchstone during the planning of the review's field trip and panel discussions.



#### Social

- Increases in urbanization in both the Southern and Caribbean regions
- Land use changes away from forest land to urban and other uses
- Pressures on public lands from increased tourism and ecotourism
- Desire for local production to decrease reliance on imported food and other forest products

- Decreasing public support for forestry research
- Increase in demand for timber as middle class population increases in Asia
- Loss of forest land due to generational and other shifts in landowner demographics
- Increased development due to land ownership desires of immigrants
- Decreasing budgets result in pressure to eliminate publically funded landowner assistance programs
- Labor issues
- Public policies at local, State, and National levels may create intended or unintended barriers to economical forest management
- State budget competition reduces the capacity of the State forestry agencies
- Push for fiscal responsibility at all levels of government is narrowing the flexibility to meet emerging issues and increasing the administrative workload
- Pressures due to increased wildfire risk coupled with the inability to fully implement prescribed fire
- Communications technology is impacting the delivery of technical assistance and technology transfer

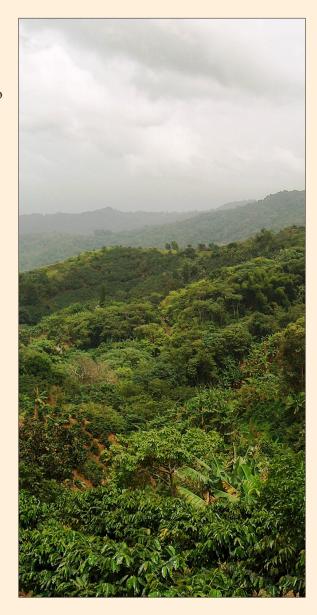
## Southern and Caribbean Forests

#### **Economic**

- Widening the Panama Canal and building the Nicaraguan Canal will increase commerce from Asia, increase competition in the forest sector, and increase the risk of damage from exotic insects and diseases
- Pressure on southern forest products markets from increased demand for wood pellets from European countries and foreign companies purchasing sawmills
- Movement of industrialization from the North and Midwest to the South, thus increased population and amenity-based migration
- Loss of forest land and forest industry jobs due to shifting timberland ownerships, foreign investments, and mill closures
- Loss of contiguous forested areas, as integrated forest products companies have sold most of their timberlands
- Tourism and ecotourism sectors are increasing in importance
- Timber contracting—labor issues, H2B Visa (i.e., a temporary Visa), loggers, and tree planters

#### **Natural Environment**

- Effects of introduced insects, diseases, plants, and animals in forest ecosystems
- Pressures on water quality and quantity due to drought and increasing populations
- High energy costs affect the competitiveness of local industry
- Public sentiment regarding fracking may lead to increased conflict with multiple use mandate/minerals program
- Salt intrusion into coastal forests due to sea level rise
- Potential listing of hundreds of threatened and endangered species will affect forest management
- Increased risk of fire, drought, and insect attacks due to climate change and increasing frequency of extreme events
- Increased forest damage from hurricanes
- Increased stress on forests from drought
- Increased urbanization has led to issues with prescribed fire use and smoke management
- Fewer prescribed fires lead to increased wildfires
- Gulf restoration activities can significantly benefit southern forests

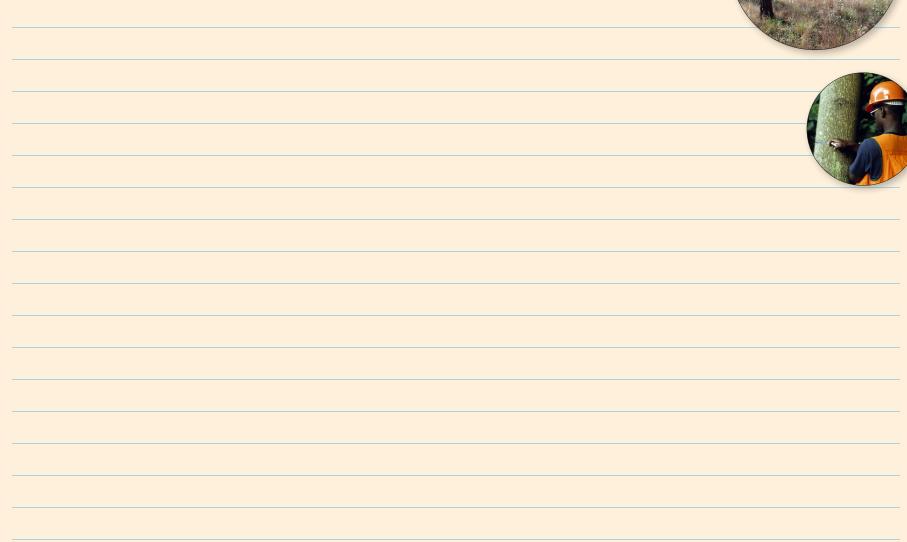




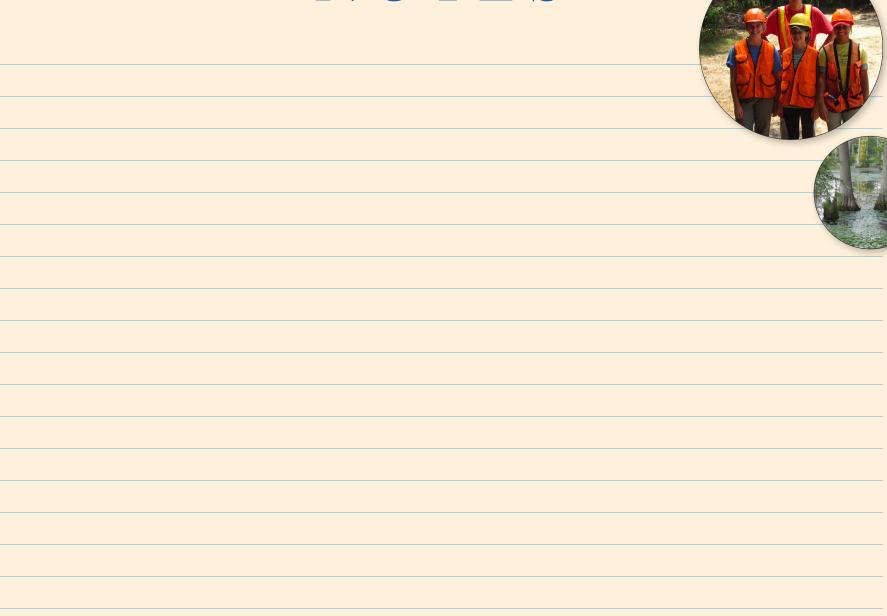
## NOTES

## NOTES





## NOTES



## Acknowledgments

We wish to thank the following staff areas for their dedication and commitment to make this review document the highest quality. It was truly a collaborative effort that exemplifies our ability to work together as Forest Service employees. In particular, we recognize the Executive Staffs of the Southern Region, SRS, and IITF; SRS Science Delivery staff; Southern Region Public Affairs staff; Leadership Teams at the Southern Region and SRS; the many scientists and support staff at IITF, SRS, and the Southern Region; and the many partners involved in this review. Finally, we would like to acknowledge the Review Team for their time and effort in helping us further the Agency's mission.







The USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is

derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.